

In the claims:

All claims in the application are indicated below.

1. (Currently amended) A data output device for rendering output content managed from an mobile information apparatus, the mobile information apparatus being distinct and separate from the output device, the output device comprising:

a rendering engine that ~~imparts output on a medium~~ outputs in accordance with output data acceptable to the output device; and

memory storage that stores at least part of one or more output device objects as encapsulations with one or more device dependent attributes corresponding specifically to the output device ;

the output device having means for providing wirelessly at least part of the output device object to the information apparatus, and means for receiving output data from the information apparatus, the output data related to the output content managed from the information apparatus and in a form at least compatible with the one or more attributes acceptable to the output device.

2. (Original) The output device of claim 1 further comprising means for storing one or more output device objects with one or more attributes corresponding to the one or more output devices.

3. (Original) The output device of claim 1 further comprising means for receiving plural service requests from plural information apparatuses, the output device providing the at least part of the output device object to each of the plural information apparatuses.

4. (Original) The output device of claim 1 in which the output device includes an audio output device.

5. (Original) The output device of claim 1 in which the at least part of the output device object is provided to the information apparatus in response to a service request received from the information apparatus.

6. (Original) The output device of claim 1 further includes means for providing the at least part of the output device object to the information apparatus

as unsolicited information without a request therefor from the information apparatus.

7. (Original) The output device of claim 1 in which the at least part of the output device object is provided to the information apparatus in more than one communication session with the information apparatus.

8. (Original) The output device of claim 1 further includes means for implementing payment processing as compensation for rendering of the output content on the output device.

9. (Original) The output device of claim 1 further includes means for implementing job management functionalities with one or more of data output job queuing and spooling.

10. (Original) The output device of claim 1 further includes means for providing a user interface for receiving user-implemented modifications of the output device.

11. (Original) The output device of claim 1 further includes means for implementing a security procedure that limits access to the rendering provided by the selected output device.

12. (Original) The output device of claim 11 in which the security procedure includes storing in a memory component an access control list specifying an information apparatus for which the selected output device will render output content.

13. (Original) The output device of claim 11 in which the security procedure includes one or more of a subscription indicator, a login, a password, and an authentication.

14. (Original) The output device of claim 1 further comprising an output controller with means for communicating with the information apparatus.

15. (Original) The output device of claim 14 in which the output controller is separate from the output device.

16. (Original) The output device of claim 14 in which the output controller further includes means for converting the output data into a form acceptable to a printer controller.

17. (Original) The output device of claim 14 in which the output controller further including means for converting the output data into a form compatible with an output engine.

18. (Original) The output device of claim 1 in which the output data received by the output device includes device dependent data acceptable to the output engine.

19. (Original) The output device of claim 1 further includes means for converting the output data content into a form compatible with the output engine.

20. (Original) The output device of claim 1 in which the output device includes one of a display device or a projection device.

21. (Original) The output device of claim 1 in which the output device further includes means for performing at least partial raster image processing operations on the output data.

22. (Original) The output device of claim 21 in which the image processing operation includes one or more of an interpretation operation, a conversion operation, a rasterization operation, a scaling operation, a segmentation operation, color space transform operation, an image enhancement operation, a color correction operation, a halftoning operation, a compression operation, and an encryption operation.

23. (Original) The output device of claim 1 in which the output device includes a printer.

24. (Original) The output device of claim 1 in which the output data includes device dependent data in relation to the output device.

25. (Original) The output device of claim 1 in which the output medium is one or more of a substrate, a paper, a display screen, and a projection.

26. (Currently amended) In a data output device for rendering output content managed with an mobile information apparatus, the mobile information apparatus being distinct and separate from the output device, the data output device including a rendering engine that ~~imparts output~~ outputs on a medium in accordance with output data received at the output device, and a memory storage that stores data for rendering; the improvement comprising:

an output controller having means for wirelessly providing to the information apparatus at least part of an output device object as an encapsulation having one or more device dependent attributes corresponding specifically to the output device, means for receiving output data related to the output content managed from the information apparatus, the output data being in a form at least compatible with the one or more attributes and means for passing the output data for rendering of the output content at the output device.

27. (Original) The output device of claim 26 in which the output data received at the output device is from a network.

28. (Original) The output device of claim 26 in which the output data received at the output device is from the information apparatus.

29. (Original) The output device of claim 26 in which the output data includes device dependent data in relation to the output device.

30. (Original) The output device of claim 26 in which the output medium is one or more of a substrate, a paper, a display screen, and a projection.

31. (Original) The output device of claim 26 in which the output controller further comprises means for storing one or more output device objects with one or more attributes corresponding to the one or more output devices.

32. (Original) The output device of claim 26 further comprising means for receiving plural service requests from plural information apparatuses, the output controller providing the at least part of the output device object to each of the plural information apparatuses.

33. (Original) The output device of claim 26 in which the output device includes a printer.

34. (Original) The output device of claim 26 in which the output controller further includes means for implementing payment processing as compensation for rendering of the output content on the output device.

35. (Original) The output device of claim 26 in which the output controller further includes means for implementing job management functionalities with one or more of data output job queuing and spooling.

36. (Original) The output device of claim 26 in which the output controller further includes means for providing a user interface for receiving user-implemented modifications of the controller.

37. (Original) The output device of claim 26 in which the output controller further includes means for implementing a security procedure that limits access to the rendering provided by the selected output device.

38. (Original) The output device of claim 26 in which the output controller is included in the output device.

39. (Original) The output device of claim 26 in which the output controller is separate from the output device.

40. (Original) The output device of claim 26 in which the output controller further includes means for converting the output data content into a form compatible with the output engine.

41. (Original) The output device of claim 26 in which the output controller further includes means for performing at least partially, raster image processing operations on the output data.

42. (Currently amended) In a data output device for rendering output content managed with an a mobile information apparatus, the mobile information apparatus being distinct and separate from the output device, the data output device including a rendering engine that ~~imparts output~~ outputs on a medium in accordance with output data received at the output device, and a memory storage that stores data for rendering; the improvement comprising:

means for wirelessly providing to the information apparatus at least part of an output device object encapsulating one or more attributes corresponding specifically to the output device, means for receiving output data related to the output content managed from the information apparatus, the output data being in a form at least compatible with the one or more attributes, and means for sending the output data to the output engine for rendering of the output content.